

Amendments to the Claims

1. (Currently Amended) A color CRT having a panel of which outer surface is substantially flat and inner surface has a predetermined curvature and a funnel coupled to a rear side of the panel,

wherein an aspect ratio of an effective surface ( $\theta$ ) of the panel is 4:3, a diagonal size ( $U$ ) of the effective surface is 570mm ~ 700mm, and a following condition is satisfied:

$$-1.7168 \cdot \ln(U) + 11.627 \leq (R_h \cdot R_v \cdot R_o / U) \cdot T_c \leq -2.0131 \cdot \ln(U) + 13.645,$$

wherein a value obtained by dividing an inner curvature radius  $R_x$  of the effective surface of the panel following a long axis ( $X$ ) by a distance  $L_x$  of the effective surface of the panel following a  $1.767 \cdot$  long axis is  $R_h$ , a value obtained by dividing an inner curvature radius  $R_y$  of the effective surface of the panel following a short axis ( $Y$ ) by a distance  $L_y$  of the effective surface following a  $1.767 \cdot$  short axis is  $R_v$ , a value obtained by dividing an inner curvature radius of the effective surface of the panel following a diagonal axis ( $D$ ) by a distance  $L_d$  of the effective surface following  $1.767 \cdot$  diagonal axis is  $R_o$ , and the thickness of the center point of the panel  $\theta$  is  $T_c$ .

2. (Original) The CRT of claim 1, wherein a following condition is satisfied:  $10\text{mm} \leq T_c \leq 12.4\text{mm}$ .

3. (Original) The CRT of claim 1, wherein a following condition is satisfied:  $0.0875 \cdot \ln(U) - 0.4192 \leq OAH/U \leq 0.0981 \cdot \ln(U) - 0.4753$ , and a tube axis directional distance from the center of the outer surface of the panel to a seal edge line is OAH.

4. (Currently Amended) A color CRT having a panel of which outer surface is substantially flat and inner surface has a predetermined curvature and a funnel coupled to a rear side of the panel,

wherein an aspect ratio of an effective surface of the panel is 16:9, a diagonal size (U) of the effective surface is 650mm ~ 760mm, a following condition is satisfied:  $-2.1319 \cdot \ln(U) + 14.589 \leq (Rh \cdot Rv \cdot Ro)/U \cdot Tc \leq -2.5462 \cdot \ln(U) + 17.414$ ,

wherein a value obtained by dividing an inner curvature radius Rx of the effective surface of the panel following a long axis (X) by a distance Lx of the effective surface of the panel following a 1.767\*long axis is Rh, a value obtained by dividing an inner curvature radius Ry of the effective surface of the panel following a short axis (Y) by a distance Ly of the effective surface following a 1.767\*short axis is Rv, a value obtained by dividing an inner curvature radius of the effective surface of the panel following a diagonal axis (D) by a distance

Ld of the effective surface following  $1.767 \times \text{diagonal axis}$  is Ro, and the thickness of the center point of the panel  $\pm \theta \theta$  is Tc.

5. (Original) The CRT of claim 4, wherein a following condition is satisfied:  $11\text{mm} \leq Tc \leq 13.4\text{mm}$ .

6. (Original) The CRT of claim 4, wherein a following condition is satisfied:

$-0.0567 \times \ln(U) + 0.5119 \leq OAH/U \leq -0.0485 \times \ln(U) + 0.4711$ , and a tube axis directional distance from the center of the outer surface of the panel to a seal edge line is OAH.

7. (Currently Amended) A color CRT having a panel of which outer surface is substantially flat and inner surface has a predetermined curvature and a funnel coupled to a rear side of the panel,

wherein an aspect ratio of an effective surface ( $\theta$ ) of the panel is 4:3, a diagonal size (U) of the effective surface is 400mm ~ 500mm, and a following condition is satisfied:

$$-0.8629 \times \ln(U) + 5.6754 \leq (Rh \times Rv \times Ro) / U \times Tc \leq -1.0547 \times \ln(U) + 6.9366,$$

wherein a value obtained by dividing an inner curvature radius Rx of the effective surface of the panel following a long axis (X) by a distance Lx of the

effective surface of the panel following a 1.767\*long axis is  $R_h$ , a value obtained by dividing an inner curvature radius  $R_y$  of the effective surface of the panel following a short axis (Y) by a distance  $L_y$  of the effective surface following a 1.767\*short axis is  $R_v$ , a value obtained by dividing an inner curvature radius of the effective surface of the panel following a diagonal axis (D) by a distance  $L_d$  of the effective surface following 1.767\*diagonal axis is  $R_o$ , and the thickness of the center point of the panel  $\pm\theta\theta$  is  $T_c$ .

8. (Original) The CRT of claim 7, wherein a following condition is satisfied:  $9\text{mm} \leq T_c \leq 11.5\text{mm}$ .

9. (Original) The CRT of claim 7, wherein a following condition is satisfied:  $0.096 * \ln(U) - 0.4322 \leq OAH/U \leq 0.1052 * \ln(U) - 0.4778$ , and a tube axis directional distance from the center of the outer surface of the panel to a seal edge line is OAH.

10. (Currently Amended) A color CRT having a panel of which outer surface is substantially flat and inner surface has a predetermined curvature and a funnel coupled to a rear side of the panel,

wherein the center transmittance of an effective surface ( $\theta$ ) of the panel is 45% ~ 75%, a diagonal size of the effective surface is 650mm ~ 700mm, and a following condition is satisfied:

$$-17.746 \cdot \ln(U) + 116.49 \leq (R_h \cdot R_v \cdot R_o) / U \cdot T_c \leq -20.322 \cdot \ln(U) + 133.45,$$

wherein a value obtained by dividing an inner curvature radius  $R_x$  of the effective surface of the panel following a long axis (X) by a distance  $L_x$  of the effective surface of the panel following a 1.767\*long axis is  $R_h$ , a value obtained by dividing an inner curvature radius  $R_y$  of the effective surface of the panel following a short axis (Y) by a distance  $L_y$  of the effective surface following a 1.767\*short axis is  $R_v$ , a value obtained by dividing an inner curvature radius of the effective surface of the panel following a diagonal axis (D) by a distance  $L_d$  of the effective surface following 1.767\*diagonal axis is  $R_o$ , and the thickness of the center point of the panel  $\theta$  is  $T_c$ .

11. (Original) The CRT of claim 10, wherein the thickness at the edge portion of the panel is equal to or smaller than 25mm.

12. (Original) The CRT of claim 10, wherein a following condition is satisfied:  $10\text{mm} \leq T_c \leq 13.4\text{mm}$ .